

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1.-16. (cancelled)

17. (original) A method of purifying a crude polycarboxylic aromatic acid composition, comprising:

contacting the crude polycarboxylic aromatic acid composition with a catalyst composite comprising

an extruded activated carbonaceous material comprising a first set of pores having a pore diameter of at least about 40 Å and at most about 100 Å with a porosity of at least about 0.15 cc/g, and a second set of pores having a pore diameter of at least about 5,000 Å and at most about 20,000 Å with a porosity of at least about 0.3 cc/g; and

a metal catalyst.

18. (original) The method according to claim 17, wherein the crude polycarboxylic aromatic acid composition comprises terephthalic acid, isophthalic acid and 2,6-naphthalene dicarboxylic acid.

19. (original) The method according to claim 17, wherein the crude polycarboxylic aromatic acid composition comprises terephthalic acid and at least one of undesirable coloring components and 4-carboxy benzaldehyde.

20. (original) The method according to claim 17, wherein the crude

polycarboxylic aromatic acid composition is contacted with the catalyst composite at a temperature from about 100°C to about 350°C under a pressure from about 150 psig to about 1,600 psig.

21. (original) A method of purifying a crude polycarboxylic aromatic acid composition, comprising:

contacting the crude polycarboxylic aromatic acid composition with a catalyst composite comprising

an extruded activated carbonaceous material having pores and wherein at least about 40% of total Hg porosity occurs in pores having a diameter of about 200 Å and larger; and

a metal catalyst.

22. (original) The method according to claim 21, wherein the crude polycarboxylic aromatic acid composition comprises terephthalic acid, isophthalic acid and 2,6-naphthalene dicarboxylic acid.

23. (original) The method according to claim 21, wherein the crude polycarboxylic aromatic acid composition comprises terephthalic acid and at least one of undesirable coloring components and 4-carboxy benzaldehyde.

24. (original) The method according to claim 21, wherein the crude polycarboxylic aromatic acid composition is contacted with the catalyst composite at a temperature from about 100°C to about 350°C under a pressure from about 150 psig to about 1,600 psig.

25. (original) The method according to claim 21, wherein at least about 34% of total Hg porosity occurs in pores having a diameter of about 5,000 Å and larger in the extruded activated carbonaceous material.

26.-28. (cancelled)

29. (new) The method according to claim 17, wherein the catalyst composite comprises about 70% by weight or more and about 99.99% by weight or less of the extruded activated carbonaceous material and about 0.01% by weight or more and about 30% by weight or less of the metal catalyst.

30. (new) The method according to claim 17, wherein the metal catalyst comprises at least one selected from the group of platinum, platinum and rhenium, platinum and ruthenium, platinum and tungsten, platinum and nickel, platinum and tin, platinum and iron, platinum and copper, platinum and rhodium, platinum and lead, platinum and germanium, palladium, palladium and rhenium, platinum and gold, platinum and tellurium, palladium and gold, palladium and indium, palladium and sulfur, palladium and tellurium, palladium and rhodium, palladium and tungsten, palladium and nickel, palladium and tin, palladium and copper, palladium and ruthenium, palladium and lead, palladium and germanium, cobalt, rhodium, ruthenium, osmium, and iridium.

31. (new) The method according to claim 21, wherein the catalyst composite comprises about 70% by weight or more and about 99.99% by weight or less of the extruded activated carbonaceous material and about 0.01% by weight or more and about 30% by weight or less of the metal catalyst.

32. (new) The method according to claim 21, wherein the metal catalyst comprises at least one selected from the group of platinum, platinum and rhenium,

platinum and ruthenium, platinum and tungsten, platinum and nickel, platinum and tin, platinum and iron, platinum and copper, platinum and rhodium, platinum and lead, platinum and germanium, palladium, palladium and rhenium, platinum and gold, platinum and tellurium, palladium and gold, palladium and indium, palladium and sulfur, palladium and tellurium, palladium and rhodium, palladium and tungsten, palladium and nickel, palladium and tin, palladium and copper, palladium and ruthenium, palladium and lead, palladium and germanium, cobalt, rhodium, ruthenium, osmium, and iridium.

33. (new) A method of purifying a crude polycarboxylic aromatic acid composition, comprising:

contacting the crude polycarboxylic aromatic acid composition with a catalyst composite comprising

an extruded catalyst support comprising an extruded activated carbonaceous material having pores and wherein at least about 38% of total Hg porosity occurs in pores having a diameter of about 1,000 Å and larger; and
a metal catalyst.

34. (new) The method according to claim 33, wherein the catalyst composite comprises about 70% by weight or more and about 99.99% by weight or less of the extruded activated carbonaceous material and about 0.01% by weight or more and about 30% by weight or less of the metal catalyst.

35. (new) The method according to claim 33, wherein the metal catalyst comprises at least one selected from the group of platinum, platinum and rhenium, platinum and ruthenium, platinum and tungsten, platinum and nickel, platinum and tin, platinum and iron, platinum and copper, platinum and rhodium, platinum and lead, platinum and germanium, palladium, palladium and rhenium, platinum and gold, platinum and tellurium, palladium and gold, palladium and indium, palladium and sulfur,

palladium and tellurium, palladium and rhodium, palladium and tungsten, palladium and nickel, palladium and tin, palladium and copper, palladium and ruthenium, palladium and lead, palladium and germanium, cobalt, rhodium, ruthenium, osmium, and iridium.

36. (new) The method according to claim 33, wherein the crude polycarboxylic aromatic acid composition comprises terephthalic acid, isophthalic acid and 2,6-naphthalene dicarboxylic acid.

37. (new) The method according to claim 33, wherein the crude polycarboxylic aromatic acid composition comprises terephthalic acid and at least one of undesirable coloring components and 4-carboxy benzaldehyde.

38. (new) The method according to claim 33, wherein the crude polycarboxylic aromatic acid composition is contacted with the catalyst composite at a temperature from about 100°C to about 350°C under a pressure from about 150 psig to about 1,600 psig.

39. (new) The method according to claim 33, wherein at least about 34% of total Hg porosity occurs in pores having a diameter of about 5,000 Å and larger in the extruded activated carbonaceous material.